

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 April 2005 (21.04.2005)

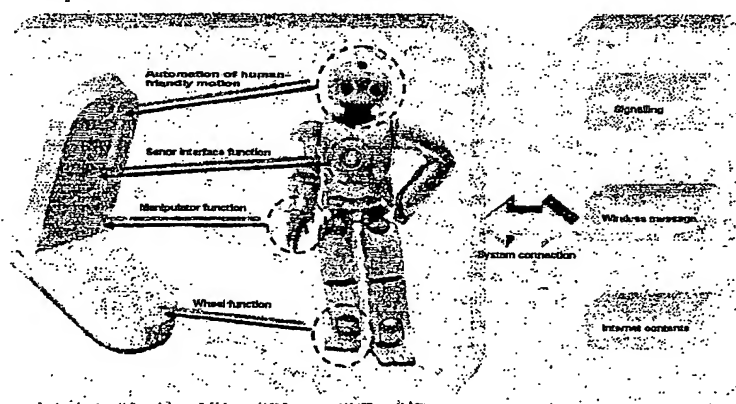
PCT

(10) International Publication Number  
**WO 2005/036766 A1**

- (51) International Patent Classification<sup>7</sup>: **H04B 1/38**
- (21) International Application Number:  
PCT/KR2003/002650
- (22) International Filing Date: 5 December 2003 (05.12.2003)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:  
10-2003-0070900 13 October 2003 (13.10.2003) KR
- (71) Applicants (for all designated States except US): **CHEON, In-Gook** [KR/KR]; Moran APT 3-1502, Ssangyong-dong, Cheonan-si, 330-090 Chungcheongnam-do (KR). **GONG, Yong-Hae** [KR/KR]; Gaepo Woosung 1-cha Apt. 10-1405, Daechi 1-dong, Gangnam-gu, 135-828 Seoul (KR). **UM, Tae-Joon** [KR/KR]; 954-21, Bangbae-dong, Seocho-gu, 137-060 Seoul (KR). **KIM, Jong-Wook** [KR/KR]; Kyungheehaksung Apt. 109-1405, 579-9, Eumnae-ri, Sinchang-myeon, Asan-si, 336-885 Chungcheongnam-do (KR).
- (72) Inventor: **KIM, Seung-Woo** [KR/KR]; 646, Soonchunhyang University, Division of Information Technology Engineering, Eumnae-ri, Sinchang-myeon, Asan-si, 336-885 Chungcheongnam-do (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHOI, Jae-II** [KR/KR]; 563-2, Galsan-ri, Tangjeong-myeon, Asan-si, 336-841 Chungcheongnam-do (KR). **JUNG, Yong-Rae** [KR/KR]; Suwongunrobokji Apt. 101-109, 432, Sinseong-ri, Inju-myeon, Asan-si, 336-832 Chungcheongnam-do (KR).
- (74) Agent: **WONJON PATENT FIRM**; 8th Floor, Poonglim Bldg., 823-1, Yeoksam-dong, Kangnam-gu, 135-784 Seoul (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,

[Continued on next page]

(54) Title: **ROBOTIC CELLULAR PHONE**



(57) Abstract: A robotic cellular phone is disclosed. The robotic cellular phone includes a self-environmental recognition function part, a mobility function part, and an emotion function part. The self-environmental recognition function part is for recognizing an external environment by a photo sensor for a sensing luminosity of a surrounding device; a temperature sensor for sensing temperatures of the surrounding device; and a touch sensor for sensing a touch between a human and the surrounding device. The mobility function part is for moving the antenna to an optimum location to increase a sending or receiving signal sensitivity and for opening and closing a folder by using a plurality of wheels formed on a part of rechargeable battery. The emotion function part is for identifying a sender by comparing data between sender telephone information included a receiving signal and a telephone data stored in an internal memory; and for making a different vibration according to an emotional pattern by modeling a frequency of a vibrator based on a major or minor key harmony or for spraying perfume through a micro-nozzle.



SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) **Designated States (regional):** ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*